


# Anti-Transferrin Receptor antibody ab84036

★★★★☆ [22 Abreviews](#) [173 References](#) [3 Images](#)

### Overview

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<b>Product name</b>	Anti-Transferrin Receptor antibody
<b>Description</b>	Rabbit polyclonal to Transferrin Receptor
<b>Host species</b>	Rabbit
<b>Specificity</b>	From Jan 2024, QC testing of replenishment batches of this polyclonal changed. All tested and expected application and reactive species combinations are still covered by our Abcam product promise. However, we no longer test all applications. For more information on a specific batch, please contact our Scientific Support who will be happy to help.
<b>Tested applications</b>	<b>Suitable for:</b> WB, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human <b>Predicted to work with:</b> Dog, Pig, Orangutan 
<b>Immunogen</b>	Synthetic peptide corresponding to Human Transferrin Receptor aa 1-100 conjugated to keyhole limpet haemocyanin. Database link: <a href="#">P02786</a> (Peptide available as <a href="#">ab101219</a> )
<b>Positive control</b>	ICC/IF: HeLa cells, WB: HeLa, Jurkat and U-2 OS whole cell lysates; Mouse spleen tissue lysate.
<b>General notes</b>	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

### Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.

<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab84036 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (9)	Use a concentration of 1 µg/ml. Detects a band of approximately 98 kDa (predicted molecular weight: 84 kDa).
ICC/IF	★★★★☆ (6)	Use a concentration of 5 µg/ml.

## Target

**Function** Cellular uptake of iron occurs via receptor-mediated endocytosis of ligand-occupied transferrin receptor into specialized endosomes. Endosomal acidification leads to iron release. The apotransferrin-receptor complex is then recycled to the cell surface with a return to neutral pH and the concomitant loss of affinity of apotransferrin for its receptor. Transferrin receptor is necessary for development of erythrocytes and the nervous system (By similarity). A second ligand, the hereditary hemochromatosis protein HFE, competes for binding with transferrin for an overlapping C-terminal binding site. Positively regulates T and B cell proliferation through iron uptake (PubMed:26642240).  
(Microbial infection) Acts as a receptor for new-world arenaviruses: Guanarito, Junin and Machupo virus.

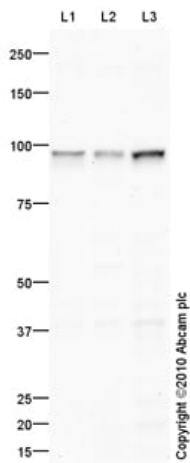
**Involvement in disease** Immunodeficiency 46

**Sequence similarities** Belongs to the peptidase M28 family. M28B subfamily.  
Contains 1 PA (protease associated) domain.

**Post-translational modifications** N- and O-glycosylated, phosphorylated and palmitoylated. The serum form is only glycosylated. Proteolytically cleaved on Arg-100 to produce the soluble serum form (sTfR).  
Palmitoylated on both Cys-62 and Cys-67. Cys-62 seems to be the major site of palmitoylation.

**Cellular localization** Secreted and Cell membrane. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

## Images



Western blot - Anti-Transferrin Receptor antibody (ab84036)

**All lanes** : Anti-Transferrin Receptor antibody (ab84036) at 1 µg/ml

**Lane 1** : HeLa (Human epithelial carcinoma cell line) whole cell lysate

**Lane 2** : Jurkat (Human T cell lymphoblast-like cell line) whole cell lysate

**Lane 3** : U-2 OS (Human osteosarcoma cell line) whole cell lysate

Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes** : Goat Anti-Rabbit IgG H&L (HRP) preadsorbed ([ab97080](#)) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

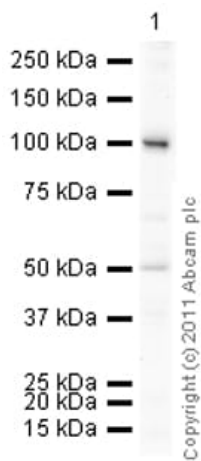
**Predicted band size:** 84 kDa

**Observed band size:** 98 kDa

**Additional bands at:** 37 kDa. We are unsure as to the identity of these extra bands.

**Exposure time:** 4 minutes

Transferrin Receptor contains a number of potential glycosylation sites (SwissProt) which may explain its migration at a higher molecular weight than predicted.



Western blot - Anti-Transferrin Receptor antibody (ab84036)

Anti-Transferrin Receptor antibody (ab84036) at 1 µg/ml + Mouse spleen tissue lysate at 10 µg

### Secondary

Goat Anti-Rabbit IgG H&L (HRP) preadsorbed ([ab97080](#)) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

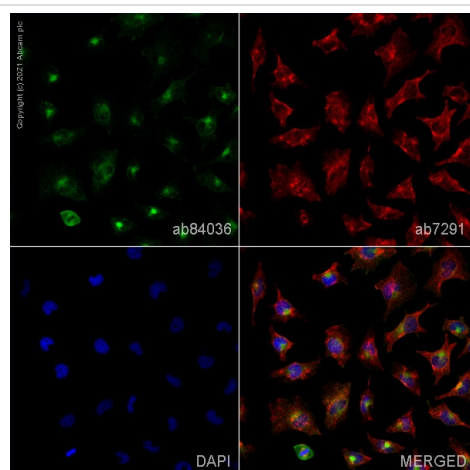
**Predicted band size:** 84 kDa

**Observed band size:** 100 kDa

**Additional bands at:** 50 kDa. We are unsure as to the identity of these extra bands.

**Exposure time:** 8 minutes

Transferrin Receptor contains a number of potential glycosylation sites (SwissProt) which may explain its migration at a higher molecular weight than predicted.



Immunocytochemistry/ Immunofluorescence - Anti-Transferrin Receptor antibody (ab84036)

ab84036 staining Transferrin receptor protein 1 in HeLa cells. The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.1% PBS-Tween for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab84036 at 5 µg/ml and [ab7291](#), Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control. Cells were then incubated with [ab150081](#), Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 488), pre-adsorbed at 1/1000 dilution (shown in green) and [ab150120](#), Goat polyclonal Secondary Antibody to Mouse IgG - H&L (Alexa Fluor® 594), pre-adsorbed at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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